

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**IN THE MATTER OF:**

Evergreen Packaging  
Kalamazoo, Michigan

Proceedings Pursuant to  
Section 113(a)(1) of the  
Clean Air Act, 42 U.S.C.  
§ 7413(a)(1)

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**NOTICE OF VIOLATION**

**EPA-5-22-MI-04**

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The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation under Section 113(a)(1) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1). EPA finds that Evergreen Packaging is violating the Michigan State Implementation Plan (SIP), as follows:

**Statutory and Regulatory Background**

1. Section 110 of the CAA 42 U.S.C. § 7410, and the regulations promulgated thereunder, establish a statutory and regulatory scheme designed to protect and enhance the quality of the nation's air so as to protect public health and welfare and the productive capacity of its population.
2. Section 110 of CAA, 42 U.S.C. § 7410(a), requires each state to adopt and submit to EPA a plan that provides for the implementation, maintenance, and enforcement of primary and secondary National Ambient Air Quality Standards in the state. Upon approval by EPA, the plan becomes part of the federally enforceable SIP by the state.
3. Section 110(a)(2)(C) of the CAA, 42 U.S.C. § 7410(a)(2)(C), requires each state to include in its SIP construction permit programs.
4. Pursuant to 40 C.F.R. § 52.23, failure to comply with any approved regulatory provision of a SIP, or with any permit condition or permit denial issued pursuant to approved or promulgated regulations for the review of new or modified stationary or indirect sources, or with any permit limitation or condition contained within an operating permit issued under an EPA-approved program that is incorporated in the SIP, shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement action under Section 113 of the CAA.

**Michigan SIP**

5. On May 6, 1980, EPA approved Michigan Rule (R) 336.1201 as part of the federally enforceable SIP for Michigan. 45 Fed. Reg. 29790.

6. R 336.1201(1) states, “[...] a person shall not install, construct, reconstruct, relocate, or modify any process or process equipment, including control equipment pertaining thereto, which may emit any of the following, unless a permit to install (PTI) that authorizes such action is issued by the department: (a) Any air pollutant regulated by title I of the CAA and its associated rules, including 40 C.F.R. §51.165 and §51.166, adopted by reference in R 336.1902. (b) Any air contaminant. A person who plans to install, construct, reconstruct, relocate, or modify any such process or process equipment shall apply to the department for a PTI on an application form approved by the department [...]”
7. R 336.1201(3) states, “A PTI may be approved subject to any condition, specified in writing, that is reasonably necessary to assure compliance with all applicable requirements.”
8. On May 31, 2019, EPA approved R 336.1205 as part of the federally approved Michigan SIP. 84 FR 25180.
9. R 336.1205(3) states, “The department may approve a PTI that includes limitations which restrict the potential to emit of a stationary source, process, or process equipment to a quantity below that which would constitute a major source or major modification under any part of these rules without meeting the requirement of subrule (1)(b) of this rule if the emission limitations restrict the potential to emit of the stationary source, process, or process equipment to less than 90% of the quantity referenced in the applicable requirement.”
10. On June 28, 2002, EPA approved R 336.1602 as part of the federally approved Michigan SIP. 67 FR 43548.
11. Under Part 6 of the Michigan SIP Air Pollution Control Rules, R 336.1602 establishes regulations for existing sources of volatile organic compound (VOC) emissions generally. R 336.1602(1) states, “A person shall not cause or allow the emission of VOC from any existing source in excess of the provisions of any rule of this part or the maximum allowable emission rate specified in [...] (a) a PTI.
12. On June 1, 2006, EPA approved R 336.1702 as part of the federally approved Michigan SIP. 71 FR 31093.
13. R 336.1702 establishes regulations for new sources of VOC emissions generally, and states, “A person who is responsible for any new source of VOC emissions shall not cause or allow the emission of VOC emissions from the new source in excess of the lowest maximum allowable emission rate of the following: (d) The maximum allowable emission rate specified in Part 6 of these rules [...]” (See R 336.1602).
14. On June 1, 2006, EPA approved R 336.2040 as part of the federally approved Michigan SIP. 71 FR 31093.
15. R 336.2040 establishes the method for determination of volatile organic compound emissions from coating lines and graphic arts lines. R 336.2040(1) states, “The methods

described in this rule shall be used for the determination of VOC emissions from coating lines and graphic arts lines for the purpose of determining compliance, during the specified averaging period, with an emission limit contained in any of the following: (a) These rules. (b) A PTI. [...]

16. R 336.2040(5) states, “The VOC content of an ink or coating, minus water, as applied, "P," shall be determined using any of the following methods: (a)(i)(A) For a coating used on a coating line or a coating used on a graphic arts line, the VOC content, minus water, as applied, shall be determined using federal reference Method 24 or federal reference Method 24a, as applicable to the coating, as described in R 336.2004, or an alternate method approved by the department. (B) For an ink that is used on a graphic arts line, the VOC content, minus water, as applied, shall be determined using federal reference Method 24a, as described in R 336.2004 [...] (b) Upon written approval by the department, the VOC content of an ink or coating may be determined from formulation data, which includes batch composition information from the ink or coating manufacturer and the amount of VOC dilution solvent added to the ink or coating before application [...].”

### **Findings of Fact**

17. Evergreen Packaging (Evergreen) owns and operates a paper converting and flexographic printing facility (Facility) at 2315 Miller Road, Kalamazoo, Michigan 49001.
18. On October 21, 2016, the Michigan Department of Environment Great Lakes and Energy (EGLE) issued PTI #102-07B, pursuant to R 336.1201(1), to the Evergreen Facility to operate eight flexographic printing presses (Flexographic Printing Presses) with emission unit IDs “EUPRESS-A,” “EUPRESS-B,” “EUPRESS-D,” “EUPRESS-F,” “EUPRESS-G,” “EUPRESS-H,” “EUPRESS-L,” and “EUPRESS-M.”
19. Under R 336-1205(3), and in accordance with R 336-1702(d) for EUPRESS-A, -B, -D, -F, -G, -H, and -M, each Flexographic Printing Press is subject to a VOC emission limit, specified in PTI #102-07B, of 7.3 tons per year (tpy) VOC determined on a 12-month rolling time period as determined at the end of each calendar month.
20. Pursuant to R 336.1201(3), to demonstrate compliance with the VOC limit in Paragraph 19, Evergreen is required to complete all required calculations by the 15<sup>th</sup> day of each calendar month, for the previous calendar month, and to keep a separate written record of the following for each Flexographic Printing Press, on a calendar month averaging period, in accordance with PTI #102-07B, R 336.1205(3), and R 336.1702(d): “(a) The type of each material used for each emission unit; (b) Chemical composition of each material, including weight percent of each component; (c) The VOC content of each material, without water and exempt solvents, (in percent by weight or pounds per gallon), as received and as applied; (d) The usage rate (in pounds or gallons) of each material as applied for each emission unit; (e) The amount (in pounds or gallons) of material reclaimed for each emission unit; (f) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month for each emission unit [...].”

21. Each Flexographic Printing Press is subject to the testing requirements of R 336.2040(5).
22. On March 16 and 18, 2021, EPA conducted a CAA inspection of the Evergreen Facility (March 2021 Inspection).
23. On March 12 and March 18, 2021, in conjunction with the March 2021 Inspection, EPA requested, among other information requested, the records required by PTI #102-07B, R 336.1205(3), and R 336.1702(d) for the period from at least January 1, 2018, to the date of the CAA inspection, including, but not limited to, monthly and annual VOC emission calculations and supporting documentation.
24. Between March 16-18, 2021, and on April 8, 2021, Evergreen provided its initial responses to EPA's March 12 and 18, 2021 requests (Initial Responses). Evergreen's Initial Responses included, among other documents, a spreadsheet with its monthly and annual VOC emission calculations from January 2015 through February 2021.
25. During the March 2021 Inspection, and upon reviewing Evergreen's Initial Responses, EPA observed that Evergreen operated ink jet printers (Ink Jet Printers) on each Flexographic Printing Press and that Evergreen did not include the Ink Jet Printers' ink and solvent usage in Evergreen's monthly and annual VOC emission calculations required by PTI #102-07B and R 336.1201(3) to demonstrate compliance with R 336.1205(3) and R 336.1702(d).
26. On April 22, 2021, EPA and Evergreen held a conference call to discuss Evergreen's Initial Responses. Following the conference, on April 22, 2021, Evergreen submitted revised monthly and annual VOC calculations (Revised Response).
27. Evergreen's Revised Response included a spreadsheet with revised monthly and annual VOC emission calculations from January 2015 through March 2021 and a presentation detailing the revisions that Evergreen made to the calculations provided in its Initial Responses.
28. The VOC emission calculations Evergreen provided in its Revised Response included VOC emissions that were previously omitted from Evergreen's Initial Responses, including those from the Ink Jet Printer ink and solvent starting in January 2018 and from isopropyl alcohol (IPA) solvent that Evergreen started using with adhesive on the Flexographic Printing Presses as of December 2019. Adhesive was not calculated correctly in November of 2017 through December of 2017.
29. According to the information provided in Evergreen's Revised Response, during the months identified in Table 1, below, EUPRESS-D and EUPRESS-G exceeded the annual VOC limits specified in PTI #102-07B of 7.3 tpy VOC per press, determined on a 12-month rolling time period as determined at the end of each calendar month.

Table 1

Unit	Exceeded Limit Time
EUPRESS-D	Sep 2017-Aug 2018 ( <b>12 months</b> )
EUPRESS-G	Aug 2018-May 2019 ( <b>10 Months</b> )
Combined	Total = 22 months of exceedances

30. According to the information provided by Evergreen's Initial and Revised Responses, Evergreen has not determined the VOC content of its materials, as received and as applied, using federal reference test Method 24 or 24A, pursuant to Rule 336.2040(5)(a), and Evergreen has not received written approval by Michigan EGLE allowing Evergreen to use manufacturer's formulation data to determine the VOC content, pursuant to Rule 336.2040(5)(b).

### **Violations**

31. As set forth in Paragraphs 25 and 28, above, Evergreen failed to correctly calculate VOC emissions from its cleaning chemicals and include its usage of the Inkjet Printer ink and solvent from at least January 2018 through February 2021, and further failed to include its usage of the IPA with adhesive on the Flexographic Printing Presses since December of 2019 through February 2021 in its records and VOC emission calculations specified in PTI #102-07B, in violation of R 336.1702(d) and R 336.1602(1)(a).
32. As set forth in Paragraph 29, above, for the months presented in Table 1, Evergreen caused or allowed the VOC emissions from EUPRESS-D and EUPRESS-G to exceed the annual VOC emission limits specified in PTI #102-07B, in violation of R 336-1702(d), R 336.1602(1)(a), and 40 C.F.R. § 52.23.
33. As set forth in Paragraph 30, above, Evergreen failed to determine the VOC content of its materials by Method 24 or Method 24A or receive written approval by Michigan EGLE to use manufacturer's formulation data to determine the VOC content, in violation of R 336.2040(5).

### **Environmental Impact of Violations**

34. These violations have caused or can cause excess emissions of VOC. VOC are emitted as gases from certain solids or liquids. VOC includes a variety of chemicals, some of which may have short- and long-term adverse health effects. Certain health effects may include eye, nose and throat irritation, headaches, loss of coordination and nausea, damage to liver, kidney and central nervous system. Some organics can cause cancer in animals, some are suspected or known to cause cancer in humans. VOCs contribute to the formation of ground-level ozone.

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Michael D. Harris  
Division Director  
Enforcement and Compliance Assurance Division